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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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INTERNATIONAL BUSINESS MACHINES CORP
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EXAMINER

CHUONG, TRUC T

ART UNIT	PAPER NUMBER
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2179

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/728,073

Applicant(s)

HENNUM, ERIK

Examiner

Truc T Chuong

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is responsive to Terminal Disclaimer, filed 12/27/04.
2. Claims 1-45 are pending in this application. Claims 1, 29, 30, 31, 32, and 45 are independent claims. This action is made non-final.

Terminal Disclaimer

3. The terminal disclaimer filed on 12/27/04 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,724,401 B1 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over FrontPage Screen Capture (herein after "FrontPage", Microsoft Copyright 1995-1999, figures 1-10) in view of Dinkelacker (U.S. Patent No. 6,092,068).

From Microsoft FrontPage → open a new file and type in "this is a test page" in Normal page (fig. 1) → select HTML page to view the source code (fig. 2) → from Help go to About Microsoft FrontPage (fig. 3) → Tech Support to view detail helps and instructions

Art Unit: 2179

associated with the HTML code (figs. 3-4). There are an index section (keyword links) and a description section with links (annotation links) to view a particular help topic in details (figs. 4 and 6).

As to claim 1, FrontPage teaches a method, performed in a web-based environment on a computer system, of helping a user learn to implement an application, the method comprising:

presenting an annotation page that includes one or more annotations descriptive (figs. 4-6) of a source file of a predetermined application (FrontPage Application to run HTML code), each annotation including keyword links, annotation links (an index section (keyword links) and a description section with links (annotation links) to view a particular help topic in details (figs. 4 and 6)), detail of implementation of the application and explanation of code used in the application (the details of coding/application/other helps can be found by selecting the keyword links or the description section (annotation links) as shown in figs. 4-6);

providing a link to a resource in an annotation (fig. 6 shows annotation with links, and the links can be linked to other sources for more information about the code);

if the user selects a keyword link, presenting reference documentation associated with that keyword (from the index keywords of fig. 4 and 6, there will be a list of topics/links about the keyword will be displayed); and

if the user selects an annotation link, presenting another annotation descriptive of another source file of a predetermined application (fig. 6 shows if the user selects annotation links in the description section, the system will teach/describe other related coding topic in details to the user); however, FrontPage does not clearly show the side by side relationships between the program code and the index descriptions which can be automatically displayed without typing

Art Unit: 2179

the keywords or manually searching from the user. Dinkelacker clearly shows that the tutor provides various information (tool tips) related the tag associated with mouse-over region in a particular section of the code in details to instruct the user with full description of that tag section (e.g., col. 3 lines 1-15, col. 4 lines 1-23, lines 53-65, and figs. 3-4). It would have been obvious at the time of the invention, a person with ordinary skill in the art would want to utilize the Tool Tip of Dinkelacker in the Coding Tech Support of FrontPage to prevent the confusion of the user/developer during the coding process to distinguish and minimize the choice(s) from the vast information/instruction about a particular code/task (only a particular tag can be viewed in details, e.g., col. 5 lines 40-44).

As to claim 2, FrontPage teaches the method of claim 1 further comprising performing a predetermined application and presenting one or more annotations descriptive of the performed application in coordination with performance of the predetermined application (e.g., figs. 4 and 6).

As to claim 3, FrontPage teaches the method of claim 2 in which performing the predetermined application comprises receiving input from the user (e.g., coding of figs. 1-2).

As to claim 4, FrontPage teaches the method of claim 3 further comprising presenting another annotation page in coordination with performance of the predetermined application based on input from the user (e.g., figs. 4 and 6).

As to claim 5, FrontPage teaches the method of claim 4 in which presenting another annotation page comprises:

automatically and simultaneously calling an annotation request module including application, file, class and function names of a program unit for which detail should be displayed

Art Unit: 2179

(figs. 4 and 6 show details of coding such as: header file, creating frames, customized tables, etc.);

mapping the request to an annotation (figs. 4 & 6); and informing a browser window in the web-based environment to display the other annotation page (Microsoft FrontPage is a web-based environment).

As to claim 6, FrontPage teaches the method of claim 3 in which another annotation page is presented in coordination with performance of the predetermined application (figs. 1-6).

As to claim 7, FrontPage teaches the method of claim 6 further comprising automatically generating a global table (the listing topic shows in figs. 4 & 6) of contents comprising links to annotations by parsing structured links in web pages including annotation pages (figs. 4 & 6).

As to claim 8, FrontPage teaches the method of claim 7 in which the links in the global table of contents are synchronized with presented annotations by highlighting links corresponding to a current annotation page (highlighting, fig. 6).

As to claim 9, FrontPage teaches the method of claim 8 in which the global table of contents is presented in a first frame of a first browser window (e.g., fig. 7), the annotation page is presented in a second frame of the first browser window, and the predetermined application is performed in a second browser window (e.g., fig. 7 shows the application is performed in a second frame).

As to claim 10, FrontPage teaches the method of claim 2 in which performing the predetermined application comprises launching a Java applet or application (e.g., fig. 8 shows Java Applet).

Art Unit: 2179

As to claim 11, FrontPage teaches the method of claim 10 in which launching the Java applet or application comprises calling a Java application programming interface to ask a web browser to show the annotation page (e.g., figs. 6-8).

As to claim 12, FrontPage teaches the method of claim 2 in which performing the predetermined application comprises downloading a hyper-text markup language page containing a Java applet (e.g., fig. 9 shows a help link to open a web browser for downloading java related products).

As to claim 15, FrontPage teaches the method of claim 2 in which the annotation page is presented in a first browser window and the predetermined application is performed in a second browser window (e.g., figs. 6-9).

As to claim 16, FrontPage teaches the method of claim 1 in which application implementation detail includes text descriptive of the application, fragments of source code from the application, or both (e.g., figs. 4-8).

As to claim 17, FrontPage teaches the method of claim 16 in which source code fragments are imported directly from the source code file of the presented application (e.g., figs. 7-9).

As to claim 18, FrontPage teaches the method of claim 1 further comprising automatically generating the annotation page descriptive of the source code file of a predetermined application (e.g., figs. 4-7).

As to claim 19, FrontPage teaches the method of claim 18 in which generating the annotation page comprises:

Art Unit: 2179

receiving a source code file that has embedded text marked up with instructions (e.g., fig. 6);

parsing the source code to determine a structure of the predetermined application (e.g., figs. 6-9); and

generating one or more annotations based on the predetermined application structure and instructions (e.g., figs. 6-9).

As to claim 20, FrontPage teaches the method of claim 19 in which generating the annotation page comprises:

generating one or more annotation links for navigating the annotations of the predetermined application (e.g., figs. 8-9);

generating application implementation detail based on the embedded information (e.g., figs. 8-9); and

generating one or more keyword links for reference documentation (e.g., figs. 6-9).

As to claim 21, FrontPage teaches the method of claim 20 in which generating the annotation page comprises highlighting the keyword links and the annotation links in the annotation page (e.g., figs. 6-9).

As to claim 22, FrontPage in view of Dinkelacker teaches the method of claim 19 further comprising automatically updating the annotation page descriptive of the source code file of the predetermined application when an updated source code file is received (e.g., FrontPage shows the download information will be updated, and Dinkelaker also teaches that the system is a dynamic tutoring system, col. 3 lines 1-3).

Art Unit: 2179

As to claim 23, FrontPage teaches the method of claim 1 further comprising automatically generating a global table of contents by parsing the plurality of annotations for annotation links (e.g., figs. 4-8).

As to claim 24, FrontPage teaches the method of claim 23 further comprising providing the global table of contents, in which the global table of contents comprises links to annotations (e.g., figs. 4-9).

As to claim 25, FrontPage teaches the method of claim 23 further comprising generating a local table of contents, in which the local table of contents comprises links to web pages including annotation pages relating to an application (e.g., figs. 8-9).

As to claim 26, FrontPage teaches the method of claim 25 further comprising providing the local table of contents when a local link in the global table of contents is selected (e.g., figs. 4-9).

As to claim 27, FrontPage teaches the method of claim 1 in which the presented annotation page is descriptive of the performed application and the annotation page is presented in coordination with performance of the predetermined application (e.g., fig. 9).

As to claim 28, FrontPage teaches the method of claim 1 further comprising:
generating a source code file stripped of annotation mark up, the generated source code file including source code of the application but not including text from the annotations (the different annotation link having different information about the code without the comment in the code, e.g., fig. 10);

presenting the stripped source code file (e.g., fig. 10); and

Art Unit: 2179

permitting the user to edit the stripped source code file (the source code from fig. 8 can be copied/pasted/modified/saved as a file).

As to claim 29, it is individually similar in scope to claim 1 above; therefore, rejected under similar rationale.

As to claim 30, FrontPage teaches a method, performed in a web-based environment on a computer system, for teaching a user to implement an application, the method comprising:

automatically assembling a global table of contents based on content in the environment, the global table of contents including a plurality of links to content within the environment (e.g., figs. 4-6);

providing the global table of contents (e.g., figs. 4-7);

generating a local table of contents that includes links to content that orient the user within a local topic (e.g., fig. 7 shows listing of other links in the annotation section); and

permitting the user to select links from the local table of contents to access local topics (e.g., figs. 7-10).

As to claim 31, FrontPage teaches a method, performed in a web-based environment on a computer system, of teaching a user to implement an application, the method comprising:

providing a plurality of predefined interactive examples; and performing one or more of the predefined interactive examples in response to user selection (e.g., figs. 8-10);

presenting one or more annotations descriptive of the performed interactive example in coordination with performance of the predefined interactive example (e.g., fig. 10); and

allowing the user to selectively explore different aspects of the performed interactive example, the annotations, or both (e.g., figs. 7-10).

Art Unit: 2179

As to claim 32, this is a system claim of method claims 1 and 31. Note the rejections of claims 1 and 31 above.

As to claim 33, FrontPage teaches the system of claim 32 further comprising a utility through which the user can access source code associated with a predefined interactive application (e.g., fig. 10).

As to claim 34, FrontPage teaches the system of claim 33 in which the utility enables the user to view or copy a predefined interactive application's source code (e.g., the source code from fig. 8 can be copied/pasted/modified/saved as a file).

As to claim 35, this is a system claim of method claim 16. Note the rejection of claim 16 above.

As to claim 36, this is a system claim of method claim 20. Note the rejection of claim 20 above.

As to claim 37, FrontPage teaches the system of claim 32 further comprising a web-browser window that includes a framework that comprises:

a content frame that displays the annotations; a framework applet that displays a navigation bar; and a table of contents frame that displays a table of contents hierarchy of links (figs. 4-10 shows navigation bar).

As to claim 38, this is a system of method claim 10. Note the rejection of claim 10 above.

As to claim 39, FrontPage in view of Dinkelacker teaches the system of claim 37 in which a Java Script automatically determines whether the framework is present in the web browser window (Dinkelacker shows using the JavaScript to tag the section, e.g., col. 3 lines 40-

Art Unit: 2179

50 and fig. 3), and if the framework is present, notifies the framework applet about the content in the framework (e.g., figs. 3-4).

As to claim 40, FrontPage teaches the system of claim 39 in which the table of contents automatically highlights a link in the hierarchy based on the content in the framework (e.g., figs. 5, 7, 9, and 10).

As to claim 41, FrontPage teaches the system of claim 40 in which the user accesses an annotation page by selecting a link in the table of content's hierarchy (e.g., fig. 5).

As to claim 42, FrontPage teaches the system of claim 40 in which the user accesses an annotation page by interacting with the navigation bar (e.g., figs. 4-7).

As to claim 43, FrontPage teaches the system of claim 40 in which the table of contents highlights the hierarchy based on an annotation page displayed in the content frame (e.g., fig. 5).

As to claim 44, FrontPage teaches the system of claim 37 in which the table of contents is dismissible or resizable (e.g., figs. 4-10 show the section can be closed or minimized).

As to claim 45, FrontPage teaches a web-based computer system for teaching a user to implement an application, the system comprising:

- a web-browser window that includes a content frame, a framework applet, and a table of contents frame that displays a global table of contents hierarchy of links related to content in the content frame (e.g., figs. 5-10);

- one or more annotations displayed in the content frame, each annotation describing a predefined interactive application and including links to other content (e.g., figs. 5-10); and

- a table of contents window that displays a local table of contents hierarchy of links related to local content in the displayed annotation (figs. 5, 8, and 10).

Art Unit: 2179

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vaidyanathan et al. (U.S. Patent No. 6,467,018) teach source code, annotation links, detail descriptions of the code, and auto help (cols. 2-11 and figs. 3A-F).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T Chuong whose telephone number is 571-272-4134. The examiner can normally be reached on M-Th and alternate Fridays 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. Chuong

04/15/05


BA HUYNH
PRIMARY EXAMINER